

# Daily Program

November 5 (Sunday)		
11:00-14:00		
14:00-17:00	Registration	<b>Plenary</b> Dry Reforming of Methane over Co-Ni based Catalysts in a DBD Non-Thermal Plasma Reactor Nor Aishah Saidina Amin (Universiti Teknologi Malaysia, Malaysia)
		<b>Invited</b> Sustainable Nitrogen Fixation for Power-to-X Hyun-Ha Kim (National Institute of Advanced Industrial Science and Technology, Japan)
		<b>Invited</b> Plasma-assisted CO <sub>2</sub> and N <sub>2</sub> Conversion into Valuable Products Pankaj Attri (Kyushu University, Japan)
		<b>Invited</b> Plasma-catalytic CO <sub>2</sub> Hydrogenation: Mechanistic Study on The Catalytic Surface Reaction Dae-Yeong Kim (Tokyo Institute of Technology, Japan)
		<b>Invited</b> Effectiveness and Energy Efficiency in Plasma-assisted Catalysis for Ammonia Synthesis Bruce E. Koel (Princeton University, USA)
17:00-18:30		Welcome Reception

Topical Workshop :  
Plasma Catalysis towards  
Decarbonizing Society

**Workshop Chair**

Tomohiro Nozaki  
(Tokyo Institute of Technology,  
Japan)

## November 6 (Monday)

9:00-10:00	Opening Ceremony & Plenary Session 1	"High Entropy Configuration Strategy for Designing Novel Materials for Electrochemical Applications" Jyh-Ming Ting (National Cheng Kung University, Taiwan) <span style="float: right;">*Session Chair : Jyh-Wei Lee (Ming Chi University of Technology, Taiwan)</span>			
10:00-10:45	Plenary Session 2	"Plasma-Enhanced Atomic Layer Deposition: An Enabling Thin Film Nanotechnology Finding Widespread Applications" Erwin Kessels (Eindhoven University of Technology, Netherlands) <span style="float: right;">*Session Chair : Toshiro Kaneko (Tohoku University, Japan)</span>			
10:45-11:00	Break				
11:00-12:30	Registration	Room A (Conference Hall B)	Room B (Conference Hall C)	Room C (Conference Hall D)	Room D (Conference Hall E)
		[Mo1A] Cutting-edge Plasma Enhanced Coatings and Surface Analysis *Session Chair : Juhahn Lee (Korea Basic Science Institute, Korea)	[Mo1B] Plasma Diagnostics *Session Chair : Timo Gans (Dublin City University, Ireland)	[Mo1C] Functional Alloy Thin Films & Coatings *Session Chair : Bill Baloukas (Polytechnique Montréal, Canada)	[Mo1D] Gas Conversion *Session Chair : Miran Mozetic (Jozef Stefan, Slovenia)
		<b>Keynote</b> [Mo1A-1] Transparent Multifunctional Cover Glass Coating for Solar Energy Applications Lars Österlund (Uppsala Univ., Sweden)	<b>Invited</b> [Mo1B-1] Tomographic Diagnosis of Plasma Parameters of ICP Discharge by Optical Emission Spectroscopy Measurement Assisted with Collisional-radiative Model Hiroshi Akatsuka (Tokyo Institute of Tech., Japan)	<b>Invited</b> [Mo1C-1] Self-formation of Metastable Structures in W-Zr Thin-Film Alloys: Opportunity for Advanced Functional Coatings Petr Zeman (Univ. of West Bohemia, Czech Republic)	<b>Invited</b> [Mo1D-1] Co-conversion of CO <sub>2</sub> and CH <sub>4</sub> for Alcohols through Plasma Catalysis Li Wang (Dalian Maritime Univ., China)
		<b>Keynote</b> [Mo1A-2] Ongoing Ambient Pressure XPS Studies in Korea Basic Science Institute Juhahn Lee (Korea Basic Science Institute (KBSI), Korea)	<b>Invited</b> [Mo1B-2] Electrically and Optically Measured Electron Plasma Frequency for Plasma Diagnostics Hyo-Chang Lee (Korea Aerospace Univ., Korea)	[Mo1C-2] Study of Microstructure and Mechanical Properties of AlCrTiZrW High Entropy Alloy Coating by High-power Impulse Magnetron Sputtering Jung-En Tsao (Ming Chi Univ. of Tech., Taiwan)	[Mo1D-2] CO <sub>2</sub> Conversion on the Presence of the Liquid Water and Hydrogen by Nanosecond-pulsed DBD Sepideh Mousazadeh Borghei (Leibniz Inst. for Plasma Science and Tech., Germany)
		[Mo1A-3] Phase Transformation Induced Nanocrystallization and Modification for Low-temperature Plasma Nitriding of 17-4PH Martensitic Stainless Steel Xu Yang (Dalian Univ. of Tech., China)	<b>Invited</b> [Mo1B-3] Determination of the Energy Flux from Process Plasma to Substrate by Passive and Active Thermal Probes Holger Kersten (Kiel Univ., Germany)	[Mo1C-3] A Sputtering Yield Amplification Study of C, Si, and Ge Doped with W, Cu, Ag, or Mo Julio César Cruz Cárdenas (Instituto de Investigaciones en Materiales-UNAM, Mexico)	<b>Keynote</b> [Mo1D-3] Thermal Plasma Processing for Hydrogen Production from Natural Gas Takayuki Watanabe (Kyushu Univ., Japan)
				[Mo1C-4] Sputter Deposition of Monolayer Thick Films of WS <sub>2</sub> and MoS <sub>2</sub> Tomas Nyberg (Uppsala Univ., Sweden)	
			[Mo1C-5] New Insights into the Mechanisms Governing Low Friction Tribolayer Formation in Alloyed-TMD Self-lubricant Coatings Albano Cavaleiro (Univ. of Coimbra, Portugal)		
			[Mo1C-6] Impact Resistance of Thermally Sprayed WC-Ni Coatings in Water Shu-jiao Zhang (Dalian Univ. of Tech., China)		

## November 6 (Monday)

12:30-14:00

Lunch

[Mo2A] Advanced Surface Plasma Process *Session Chair : Jei-Pil Wang (Pukyong National University, Korea)	[Mo2B] New Phenomena & Applications *Session Chair : Holger Kersten (University Kiel, Germany)	[Mo2C] Functional Oxide Thin Films *Session Chair : Petr Zeman (University of West Bohemia, Czech Republic)	[Mo2D] Functional Materials (1) *Session Chair : Ton Hurkmans (Ionbond, Netherlands)
<b>Keynote</b> [Mo2A-1] Development and Integration of Microplasma Sources in Additive Manufacturing Processes – Application and Perspectives Michael Thomas (Fraunhofer IST, Germany)	<b>Invited</b> [Mo2B-1] Self-organized Pattern Formation Observed in DC Excited Glow Discharge in Atmospheric Pressure Air Naoki Shirai (Hokkaido Univ., Japan)	<b>Invited</b> [Mo2C-1] Next Generation Optical Coatings: Hybrid, Active and Nanostructured Bill Baloukas (Polytechnique Montréal, Canada)	<b>Invited</b> [Mo2D-1] Plasma-driven Atomic-scale Engineering of Functional Material Surfaces in New Generation Energy Devices Alberto Perrotta (Italian Nat'l Research Council, Italy)
<b>Keynote</b> [Mo2A-2] Newly Proposed Recycling Technology of End-of-life Lithium-ion Battery Jei-Pil Wang (Pukyong Nat'l Univ., Korea)	<b>Invited</b> [Mo2B-2] A Potential of Cold Plasma Technology for Food Security in Thailand Choncharoen Sawangrat (Chiang Mai Univ., Thailand)	<b>Invited</b> [Mo2C-2] Characteristics of Oxide Semiconductor Films Deposited by Reactive Plasma Deposition Hisashi Kitami (Sumitomo Heavy Industries, Ltd., Japan)	<b>Invited</b> [Mo2D-2] Plasma-assisted Catalytic Processes for Hydrogen Storage and Production Volker Brüser (INP Greifswald, Germany)
<b>Invited</b> [Mo2A-3] Plasma Treatments of Nanocellulose Materials and Their Applications in Energy Storage Materials Hyeyun Kim (KIST, Korea)	<b>Invited</b> [Mo2B-3] Development of Cold Plasma and Microwave for Sperm Sexing Suchada Phunsathitwong (Chiang Mai Univ., Thailand)	<b>Keynote</b> [Mo2C-3] Low-Temperature Scalable Deposition of Thermochromic VO <sub>2</sub> -Based Coatings for Energy-Saving Smart Windows Jaroslav Vlcek (Univ. of West Bohemia, Czech Republic)	<b>Invited</b> [Mo2D-3] Solution Plasma-modified SWCNT-Pt Catalyst and its Electrocatalytic Properties in Fuel Cell Zhuoya Deng (Nagoya Univ., Japan)
[Mo2A-4] Investigation of Tapered Profile Formation and Etching Stop in High Aspect Ratio SiO <sub>2</sub> Etching Processes Wonnyoung Jeong (Chungnam Nat'l Univ., Korea)		<b>Invited</b> [Mo2C-4] Progress on Piezocatalysis and Piezo-Photocatalysis: Energy and Environmental Applications Jyh-Ming Wu (Nat'l Tsing Hua Univ., Taiwan)	[Mo2D-4] Microstructure and Tribological Property of Siliconized Graphite in High-temperature and High-pressure Water Sihang Liu (Dalian Univ. of Tech., China)
[Mo2A-5] Recovery of High Purity Nickel Sulfate Powder Using Ion Exchange Resin From Wasted Nickel Plating Solution Seung-uk Hwang (Pukyong Nat'l Univ., Korea)			[Mo2D-5] Metal Nanoparticles-Decorated Hierarchical Graphene Using IR Irradiation as Electrocatalysts for Hydrogen Evolution Reaction Seung Geun Jo (Pusan Nat'l Univ., Korea)
			[Mo2D-6] Synthesis of Iron-Based Core@Shell Nanoparticles/N-Doped Reduced Graphene Oxide Support Composite for Supercapacitors through Phase Control and Heteroatom Doping Jaemin Lee (Pusan Nat'l Univ., Korea)

Registration

14:00-16:00

16:00-16:20

Break

16:20-18:00

Poster Session 1

## November 7 (Tuesday)

9:00-9:45	Plenary Session 3	<b>"Contact Electrification for Self-Powered Wearable and Biomedical Applications"</b> Sang-Woo Kim (Yonsei University, Korea) <div style="text-align: right; font-size: small;">*Session Chair : Jang Hee Yoon (Korea Basic Science Institute, Korea)</div>		
9:45-10:30	Plenary Session 4	<b>"Biological Applications Using High-density Atmospheric-Pressure Plasmas"</b> Masafumi Ito (Meijo University, Japan) <div style="text-align: right; font-size: small;">*Session Chair : Eun Ha Choi (KwangWoon University, Korea)</div>		
10:30-10:45	Break			
10:45-12:15	Room A (Conference Hall B)	Room B (Conference Hall C)	Room C (Conference Hall D)	Room D (Conference Hall E)
	[Tu1A] Plasma-driven Materials and Surface and Engineering *Session Chair : Oi Lun Helena LI (Pusan National University, Korea)	[Tu1B] Plasma Medicine *Session Chair : Nagendra Kaushik (KwangWoon University, Korea)	[Tu1C] HiPIMS Technology and Coatings *Session Chair : Bih-Show Lou (Chang Gung University, Taiwan)	[Tu1D] Functional Materials (2) *Session Chair : Angel Barranco (Instituto de Ciencia de Materiales de Sevilla, Spain)
	<b>Invited</b> [Tu1A-1] Plasma-Engineered Negative Surface-Mediated Catalysts for Seawater-based Batteries and Direct Seawater Electrolysis Oi Lun Helena LI (Pusan Nat'l Univ., Korea)	<b>Invited</b> [Tu1B-1] The Interplay of Long Noncoding RNA and MicroRNA Mediates the Anti-tumor Effect of Cold Atmospheric Plasma in Cancer Cells Sun Jung Kim (Dongguk Univ., Korea)	<b>Invited</b> [Tu1C-1] Towards the Growth of Cubic Boron Nitride Coatings by High-power Impulse Magnetron Sputtering Tetsuhide Shimizu (Tokyo Metropolitan Univ., Japan)	<b>Invited</b> [Tu1D-1] Plasma Nitriding for Enhanced Corrosion and Wear Resistance in Additive Manufacturing Metallic Materials Matjaž Godec (Inst. of Metals and Tech., Slovenia)
	<b>Invited</b> [Tu1A-2] Carbon-based Functional Materials for Soft Electronics Jung Woo Lee (Pusan Nat'l Univ., Korea)	[Tu1B-2] Selective Cytotoxicity of Plasma-Treated L-Arginine Solution on Human Breast Cancer Cells Lijun Du (Nagoya Univ., Japan)	[Tu1C-2] Microstructure and Corrosive Wear Resistance of AlCrNbSiTiN Multi-principal Element Alloy Nitride Coatings Ismail Rahmadtulloh (Nat'l Taiwan Univ. of Science and Tech., Taiwan)	<b>Invited</b> [Tu1D-2] PVD Thin Film Coatings, The Enabling Technology for Sustainable Solutions and Carbon Footprint Reductions Ton Hurkmans (IH Ionbond Group, Netherlands)
	<b>Invited</b> [Tu1A-3] Atomic Scale Surface Modification of Nanomaterials for Electrochemical Applications Se-Hun Kwon (Pusan Nat'l Univ., Korea)	[Tu1B-3] Mechanisms of Selective Killing of Cancer Cells Against Normal Cells by Plasma-activated Ringer's Lactate Solution Hiromasa Tanaka (Nagoya Univ., Japan)	[Tu1C-3] 12 μm PVD in HiPIMS Alexander Marxer (CemeCon KK, Japan)	<b>Invited</b> [Tu1D-3] Synthesis of Multilayer Graphene Nano-mesh from Waste Plastics upon Treatment with Inductively Coupled Plasma in the H-mode Gregor Primc (Jozef Stefan Institute, Slovenia)
		[Tu1B-4] Evaluation of Autophagy-Inducing Substances in PAL Components on Cancer Cells Taiishi Yamakawa (Nagoya Univ., Japan)	[Tu1C-4] Mechanical Properties Evaluation of TiZrNbTaFeN/TiN High Entropy Alloy Nitride Multilayer Thin Films Sheng-Yuan Hung (Ming Chi Univ. of Tech., Taiwan)	
		[Tu1B-5] Cellular Response to Electrical Stimulation on Carbon Nanowalls Coated with Silicon Carbide Koki Ono (Nagoya Univ., Japan)	[Tu1C-5] Effects of Nitrogen Contents on the Properties of TiZrNbSiMoN <sub>x</sub> High Entropy Alloy Coatings Ren-Zong Lin (Ming Chi Univ. of Tech., Taiwan)	
	12:15-13:45	Lunch		

## November 7 (Tuesday)

		[Tu2A] Plasma Coatings and Surface Property *Session Chair : Mukesh Ranjan (Institute for Plasma Research, India)	[Tu2B] Plasma Agriculture *Session Chair : Hiromasa Tanaka (Nagoya University, Japan)	[Tu2C] Electronics and Energy Related Thin Films *Session Chair : Tetsuhide Shimizu (Tokyo Metropolitan University, Japan)	[Tu2D] Plasma-Liquid Interactions *Session Chair : Naoki Shirai (Hokkaido University, Japan)
13:45-15:45	Registration	<b>Invited</b> [Tu2A-1] Ar Plasma Nanostructuring on PTFE Surfaces for the Wettability Transition and Sensing Applications Mukesh Ranjan (Institute for Plasma Research, India)	<b>Keynote</b> [Tu2B-1] EU Activities: Non-equilibrium Plasma as a Novel Tool in Agriculture and Food Technologies Nevena Puač (Univ. of Belgrade, Serbia)	<b>Invited</b> [Tu2C-1] Low Melting Point Solder Thin Film for High-density Bonding Technology in 3D IC Yingxia Liu (City Univ. of Hong Kong, Hong Kong)	<b>Invited</b> [Tu2D-1] The Role of Surface Interactions and Negative Ions in Radio-frequency Driven Plasmas Timo Gans (Dublin City Univ., Ireland)
		[Tu2A-2] Numerical Study on Comparison of Hole/Line Patterned Trench Etching Profile Byeong-Yeop Choi (Chungnam Nat'l Univ., Korea)	<b>Invited</b> [Tu2B-2] Plasma-Activated Water Application on Biomass and the Plant Tissue Culture in Tomato Young KOUNG Lee (Korea Institute of Fusion Energy (KFE), Korea)	[Tu2C-2] Pre-treatment of Substrate Surfaces for Epitaxial Overgrowth by Magnetron Sputtering Alexander Hinz (Fraunhofer FEP, Germany)	<b>Invited</b> [Tu2D-2] Production and Application of High-density Microwave Plasma in Contact with Flowing Liquid Haruka Suzuki (Nagoya Univ., Japan)
		[Tu2A-3] Effect of (NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub> Concentration on Surface Roughness and Corrosion Resistance for Plasma-electrolytic Polishing of 316 Stainless Steel Neng-Kun Cheng (Ming Chi Univ. of Tech., Taiwan)	<b>Invited</b> [Tu2B-3] Quantitative Analysis of Plasma Irradiation Dose to Seeds Masaharu Shiratani (Kyushu Univ., Japan)	[Tu2C-3] Development of a Model to Predict the Thickness of the S-phase and Surface Properties of Plasma-nitrided Austenitic Steels Phillip Marvin Reinders (Technische Universität Braunschweig, Germany)	[Tu2D-3] Effects of Plasma-activated Water on Coffee Ground Decomposition and Nitrogenous Substances Formation Shao-Hsuan Chin (National Tsing Hua Univ., Taiwan)
		[Tu2A-4] Surface Flatness and Pitting Resistance of Plasma-electrolytic Polished 304 Stainless Steel Chun-Wei Chang (Ming Chi Univ. of Tech., Taiwan)	[Tu2B-4] Herbicide Degradation via Pinhole and Gliding Arc Plasma Systems Chonlada Bennett (Chiang Mai Univ., Thailand)	[Tu2C-4] Development of Roll-to-roll PVD-Arc Coatings for Metallic Bipolar Plates Maurizio Giorgio (Fraunhofer IWS, Germany)	[Tu2D-4] Investigation on the Relationship between Changes in Cavity Depth and Physical Properties of Liquids in Plasma-Liquid Interactions Hyungyu Lee (Korea Advanced Institute of Science and Technology (KAIST), Korea)
		[Tu2A-5] Effect of Water-Resistant Properties of Kraft Paper (KP) Using Sulfur Hexafluoride (SF <sub>6</sub> ) Plasma Coating Pornchai Rachtanapun (Chiang Mai Univ., Thailand)	[Tu2B-5] Analysis of Non-equilibrium Cold Plasma Impact on Structural and Functional Characteristics of Finger Millet Ritesh Mishra (IIT Jodhpur, India)		[Tu2D-5] Decaying Characteristics of Short-lived Reactive Nitrogen Species Generated by Gas-liquid Interfacial Plasma Toshiro Kaneko (Tohoku Univ., Japan)
			<b>Invited</b> [Tu2B-6] National Research Strategies: Unlocking the Potential of Plasma in Frontier Applications Komgrit Leksakul (Chiang Mai Univ., Thailand)		[Tu2D-6] Process Intensification in a Plasma-Liquid Interface Process Using a Gas-Liquid Separator Tatsuru Shirafuji (Osaka Metropolitan Univ., Japan)
	15:45-16:00	Break			
16:00-17:40	Poster Session 2				
17:50-20:30	Banquet				

## November 8 (Wednesday)

9:00-9:45	Plenary Session 5	<p style="text-align: center;">"Low Temperature Nitrogen-plasma Engineered High-efficiency Electrocatalytic Electrode Materials" Rajdeep Singh Rawat (Nanyang Technological University, Singapore)</p> <p style="text-align: right;">*Session Chair : Wonho Choe (KAIST, Korea)</p>		
9:45-10:00	Break			
10:00-12:00	Room A (Conference Hall B)	Room B (Conference Hall C)	Room C (Conference Hall D)	Room D (Conference Hall E)
	[We1A] Plasma Chemistry & Atomic and Molecular Processes *Session Chair : Tatsuru Shirafuji (Osaka Metropolitan University, Japan)	[We1B] Plasma Bioscience *Session Chair : Sun Jung Kim (Dong-guk University, Korea)	[We1C] Protective Coatings *Session Chair : Helmut Riedl-Tragenreif (Technische Universität Wien, Austria)	[We1D] Functional Materials (3) *Session Chair : Volker Brüser (INP Greifswald, Germany)
	<b>Invited</b> [We1A-1] Low and High Frequency Combined Hybrid Plasmas and Their Perspective for Material Processing Bibhuti Bhusan Sahu (IIT Delhi, India)	<b>Invited</b> [We1B-1] Plasma based Microbial Inactivation and Environmental Applications Nagendra Kumar Kaushik (Kwangwoon Univ., Korea)	<b>Invited</b> [We1C-1] Development of Multicomponent and Multilayer Hard Coatings for Thermal Stabilities and Tribological Applications Yin-Yu Chang (Nat'l Formosa Univ., Taiwan)	[We1D-1] Pt Based Catalyst Synthesized by Solution Plasma Process for Oxygen Reduction Reaction Yuanyuan Liu (Nagoya Univ., Japan)
	[We1A-2] Characterization of Plasma Chemistry Generated from Low Global Warming Potential Precursors: C <sub>3</sub> HF <sub>7</sub> and C <sub>3</sub> H <sub>2</sub> F <sub>8</sub> Youngseok Lee (Chungnam Nat'l Univ., Korea)	[We1B-2] Rapid Transformation of Organic Waste to Nitrogenous Fertilizer through Plasma Activated Water Treatment Pin-Hao Huang (Nat'l Tsing-Hua Univ., Taiwan)	[We1C-2] Influence of Target Composition on the Properties of AlCrN Film Grown by High Power Impulse Magnetron Sputtering Bo-Ruei Lu (Ming Chi Univ. of Tech., Taiwan)	[We1D-2] Core-shell Bifunctional $\alpha$ -Fe <sub>2</sub> O <sub>3</sub> /Fe <sub>2</sub> TiO <sub>5</sub> /Pt Photoelectrode for Efficient Oxygen Evolution and Oxygen Reduction Reactions in Solar Rechargeable Zn-Air Batteries Hasmat Khan (Pusan Nat'l Univ., Korea)
	[We1A-3] Process Monitoring during Plasma Electrolytic Polishing (PEP) of WC-Co Based Cemented Carbide Sehoon An (INP Greifswald, Germany)	<b>Invited</b> [We1B-3] Plasma Surface Modification: A Promising Tool for Biomedical Applications Sandra Carvalho (Univ. of Coimbra, Portugal)	[We1C-3] Effect of Deposition Parameters on the Fabrication of TiO <sub>2</sub> Coatings Using Superimposed HiPIMS and MF System Shih-Yang Hsu (Nat'l Taipei Univ. of Tech., Taiwan)	[We1D-3] Surface Texture Design of FBR-ALD Pt/C Catalyst to Enhance PEMFC Performance Ji-Hu Baek (Pusan Nat'l Univ., Korea)
	[We1A-4] Plasma Fundamental Research Activities based on Atomic and Molecular Data in Korea Institute of Fusion Energy Mi-Young Song (Korea Institute of Fusion Energy (KFE), Korea)	[We1B-4] <i>Colletotrichum gloeosporioides</i> Fungal Inhibition by Plasma Technology Norrapon Vichiansan (Chiang Mai Univ., Thailand)	[We1C-4] Tribological and Mechanical Properties of AlTiN Coating as a Function of Al-Ti Ratio and Bias Jiri Nohava (Anton Paar TriTec, Switzerland)	[We1D-4] Corrosion and Passivation of Fe-Mn-Al-Cr-Cr TWIP Steels in 1 mol/l Na <sub>2</sub> SO <sub>4</sub> Solution Taihe Liang (Dalian Univ. of Tech., China)
	[We1A-5] A Theoretical Investigation to Identify Eco-friendly SF <sub>6</sub> Alternative Gas for Semiconductor Processing Applications: Electron Impact Studies of Cross Sections and Transport Parameters Nidhi Sinha (Korea Institute of Fusion Energy (KFE), Korea)	[We1B-5] Mechanical Property Evaluation of ZrTiNbFe Medium Entropy Alloy Thin Films Shao-Kai Chung (Ming Chi Univ. of Tech., Taiwan)	[We1C-5] Corrosion Resistance of TiZrNbTaFeBN <sub>x</sub> High Entropy Alloy Nitride Films Prepared by High Power Impulse Magnetron Sputtering System Meng-Hsueh Chuang (Nat'l Taiwan Univ. of Science and Tech., Taiwan)	<b>Invited</b> [We1D-5] Multifunctional Plasma Polymers and Supported Oxide Nanostructures by Remote Plasma Assisted Vacuum Deposition Angel Barranco (National Research Council of Spain, Spain)

## November 8 (Wednesday)

12:00-13:30	Lunch			
	[We2A] Plasma Enhanced Functional Materials and Applications *Session Chair : Andrey Shukurov (Charles University, Czech Republic)	[We2B] Plasma Characteristics and Bioscience *Session Chair : Sandra Carvalho (University of Coimbra, Portugal)	[We2C] Boride and Boron-Contained Coatings *Session Chair : Yin-Yu Chang (National Formosa University, Taiwan)	[We2D] Plasma Discharge & Plasma Sources *Session Chair : James Walsh (University of York, UK)
13:30-14:45	<b>Invited</b> [We2A-1] One-Step Sputter-Driven Synthesis of Metal Nitride Nanoparticles and Nanofluids Andrey Shukurov (Charles Univ., Czech Republic)	<b>Invited</b> [We2B-1] Lifetime of Nitric Oxide Produced by a Surface DBD in Controlled Atmospheres Sanghoo Park (Korea Advanced Institute of Science and Technology (KAIST), Korea)	<b>Invited</b> [We2C-1] Next-generation Protective Coating Materials - From Binary to Quaternary Transition Metal Diborides Helmut Riedl-Tragenreif (Technische Universität Wien, Austria)	[We2D-1] Computational Study on Breakdown Physics in a Radio-Frequency Capacitively Coupled Plasma Si-jun Kim (Chungnam Nat'l Univ, Korea)
	[We2A-2] The Modified Method for Hydrated Cement by Plasma Activated Water Pitiwat Wattanachai (Chiang Mai Univ., Thailand)	[We2B-2] Enhancing <i>Pleurotus sajor-caju</i> (Fr. <i>Singers</i> ) Growth Rate Through Plasma Activation of Growth Medium Pongsawat Premphet (Chiang Mai Univ., Thailand)	[We2C-2] Effects of TiB <sub>2</sub> Alloying on Microstructure and Mechanical Properties of TiZrNbTaFeN Coatings Fabricated by Superimposed HiPIMS-MF Igamcha Moirangthem (Nat'l Taiwan Univ. of Science and Tech., Taiwan)	[We2D-2] Development of A New Method for Controlling Hot Electrons Density and Temperature in Low-pressure Gas Discharge Gunjan Sharma (Institute for Plasma Research, India)
	[We2A-3] Direct Synthesis of Amorphous Iron Oxide Nanoparticles Incorporated on Chitosan Oligomer via Solution Plasma Chayanaphat Chokradjaroen (Nagoya Univ., Japan)		[We2C-3] Mechanical Property Evaluation of ZrWTiB Boride Thin Films Wei Xiang Fang (Ming Chi Univ. of Tech., Taiwan)	[We2D-3] An Experimental Study on the Role of Hot Electrons in Dust Charging Process Rupali Paul (Institute for Plasma Research, India)
			[We2C-4] Effect of Selective Ion Bombardment on the Growth of Boron Carbon Nitride Films Using HiPIMS Hayate Nagakura (Tokyo Metropolitan Univ., Japan)	
14:45-15:00	Break			

## November 8 (Wednesday)

		[We3A] Plasma Innovations *Session Chair: Trung Nguyen Tran (Nagoya University, Japan)	[We3B] Plasma Bioscience and Agriculture *Session Chair: Sanghoo Park (KAIST, Korea)	[We3C] Functional Coating & Thin Films *Session Chair: Jyh-Wei Lee (Ming Chi University of Technology, Taiwan)	[We3D] Environmental *Session Chair: Pankaj Attri (Kyushu University, Japan)
15:00-16:30	Registration	[We3A-1] Transient Behavior of Cycle Process in Ar Plasma with Alternately Injected C <sub>4</sub> F <sub>8</sub> and SF <sub>6</sub> Taito Yoshie (Nagoya Univ., Japan)	<b>Invited</b> [We3B-1] Atmospheric Pressure Air Plasma for Removal and Detoxification of Bisphenol-A and Bisphenol-B from Wastewater Martina Modic (Josef Stefan Institute, Slovenia)	<b>Invited</b> [We3C-1] Plasma Electrolytic Oxidation of Light Metals in Aqueous Solutions Sungmo Moon (Korea Institute of Materials Science (KIMS), Korea)	<b>Invited</b> [We3D-1] Plasma Reactive Species Production and Delivery into Liquids Deborah O'Connell (Dublin City Univ., Ireland)
		[We3A-2] Effect of Pre-treatment on High Quality Boron Doped Diamond Film by HFCVD and Its Application Songhyeon Lee (Pusan Nat'l Univ., Korea)	<b>Invited</b> [We3B-2] Plasma-Based Strategies for Enhanced Food Safety: From Food-contact Surfaces to Complex Food Products James Walsh (Univ. of York, UK)	[We3C-2] Plasma Nitriding at Increased Voltage Peter Kaestner (Technische Universität Braunschweig, Germany)	[We3D-2] The Calculation of Transport Property Based on Boltzmann-Weighted Full-Dimensional Potential Energy Model Zhang Xin (Peking Univ., China)
		[We3A-3] Highly Active Pt-based Alloy Synthesis by Solution Plasma Jiangqi Niu (Nagoya Univ., Japan)			[We3D-3] Decomposition of Organophosphate Flame Retardants by Atmospheric DC Water Plasma Chengyuan Duan (Kyushu Univ., Japan)
		[We3A-4] Unravelling Dissociation of Hydrofluorocarbon Molecules through Photoelectron-Photoion Coincidence (PEPICO) Studies Trung Nguyen Tran (Nagoya Univ., Japan)			[We3D-4] Non-thermal Oxygen Plasma Irradiation for Removal of Metal Ions from Water Sayma Khanom (Kyushu Univ., Japan)
		[We3A-5] SAW Device Passivation Performance of Silicon Oxynitride Thin Films Deposited through Reactive Sputtering Yeongha Song (Pusan Nat'l Univ., Korea)			[We3D-5] Wind Turbine Blade Waste (WTBW) Using Microwave Plasma Reactor as A Sustainable Approach for Resource Recovery Dwi Rasy Mujiyanti (Chung Yuan Christian Univ., Taiwan)
16:30-16:45		Closing Ceremony			